Ultramicroscopy 31 (1989) 489–491
North-Holland

AUTHOR INDEX TO VOLUME 31

Auchterlonie, G.J., D.R. McKenzie and D.J.H. Cockayne, Using ELNES with parallel EELS for differentiating between a-Si : X thin films 31 (1989) 217

Bartelt, N.C., see Williams 31 (1989) 36
Barth, M., R.K. Bryan and R. Hegerl, Approximation of missing-cone data in 3D electron microscopy 31 (1989) 365
Bates, R.H.T. and J.M. Rodenburg, Sub-ångström transmissing microscopy: a Fourier transform algorithm for microdiffraction plane intensity information 31 (1989) 303
Bauer, E., M. Mundschau, W. Swiech and W. Telieps, Surface studies by low-energy electron microscopy (LEEM) and conventional UV photoemission electron microscopy (PEEM) 31 (1989) 49
Baumeister, W., see Guckenberger 31 (1989) 327
Baumeister, W., see Jakubowski 31 (1989) 351
Bender, H., see Romano 31 (1989) 183
Billyard, P.D., see White 31 (1989) 124
Bleloch, A.L., A. Howie and R.H. Milne, High resolution secondary electron imaging and spectrscopy 31 (1989) 99
Booker, G.R., see Petford-Long 31 (1989) 385
Boothroyd, C.B. and W.M. Stobbs, The contribution of inelastically scattered electrons to high resolution [110] images of AlAs/GaAs heterostructures 31 (1989) 259
Braunschweig, E.J., see Logan 31 (1989) 132
Bryan, R.K., see Barth 31 (1989) 365

Chadi, D.J., Atomic structure of reconstructed group IV and III–V semiconductor surfaces 31 (1989) 1
Chadwick, M.M. and T.F. Malis, AEM characterization of sintered silicon nitride with yttria and alumina additions 31 (1989) 205
Cochrane, H.D., J.L. Hutchison and D. White, Surface studies of catalytic ceria using atomic-resolution TEM 31 (1989) 138
Cockayne, D.J.H., see Auchterlonie 31 (1989) 217
Cowley, J.M., see Hembree 31 (1989) 111
Cowley, J.M., see Yao 31 (1989) 149
Cowley, J.M., Surface channelling effects in electron holograms 31 (1989) 223
Cowley, J.M., see Wang 31 (1989) 437
Crewe, A.V., see Shao 31 (1989) 199
Crozier, P.A., see Hembree 31 (1989) 111

Datye, A.K., see Logan 31 (1989) 132
Demuth, J.E., see Hamers 31 (1989) 10
Doust, T., F.L. Metcalfe and J.A. Venables, Biassed secondary electron imaging studies of Ag/Si(111) 31 (1989) 116
Drucker, J.S., see Hembree 31 (1989) 111

Evans, J.W., D.K. Flynn and P.A. Thiel, Influence of adsorption-site geometry and diffusion on thin-film growth: Pt/Pd(100) 31 (1989) 80

Fan, H.J. and L.D. Marks, Phase transitions in V_2O_5 in a high resolution electron microscope 31 (1989) 357
Farrow, N.A. and F.P. Ottensmeyer, Maximum entropy methods and dark field microscopy images 31 (1989) 275
Fink, H.-W., see Stocker 31 (1989) 379
Flynn, D.K., see Evans 31 (1989) 80
Fong-Lochovsky, A., see Harauz 31 (1989) 333

Gibson, J.M. and M.Y. Lanzerotti, Silicon oxidation studied by in-situ TEM 31 (1989) 29
Glaeser, R.M. see Jakubowski 31 (1989) 351
Guckenberger, R., W. Wiegräbe, A. Hillebrand, T. Hartmann, Z. Wang and W. Baumeister, Scanning tunneling microscopy of a hydrated bacterial surface protein 31 (1989) 327

Hamers, R.J., U.K. Köhler and J.E. Demuth, Nucleation and growth of epitaxial silicon on Si(001) and Si(111) surfaces by scanning tunneling microscopy 31 (1989) 10
Harauz, G. and A. Fong-Lochovsky, Automatic selection of macromolecules from electron micrographs by component labelling and symbolic processing 31 (1989) 333
Hartmann, T., see Guckenberger 31 (1989) 327
Hawkes, P.W., New books, journals, proceedings,... 31 (1989) 245
Hegerl, R., see Barth 31 (1989) 365
Hembree, G.G., P.A. Crozier, J.S. Drucker, M. Krishnamurthy, J.A. Venables and J.M. Cowley, Biassed secondary electron imaging in a UHV-STEM 31 (1989) 111
Heyraud, J.C., see Métois 31 (1989) 73
Hillebrand, A., see Guckenberger 31 (1989) 327
Hines, R.L., Pointed filament illumination characteristics 31 (1989) 319

0304-3991/89/$03.50 © Elsevier Science Publishers B.V.
(North-Holland)

Hockly, M., see Petford-Long 31 (1989) 385
Howie, A., see Bleloch 31 (1989) 99
Hutchison, J.L., see White 31 (1989) 124
Hutchison, J.L., see Cochrane 31 (1989) 138

Isaacson, M., see Ouyang 31 (1989) 345

Jaffer, M.A., see Lawrence 31 (1989) 285
Jakubowski, U., W. Baumeister and R.M. Glaeser, Evaporated carbon stabilizes thin, frozen-hydrated specimens 31 (1989) 351
Jesson, D.E. and J.W. Steeds, High-energy electron diffraction from transverse stacking faults in the projection approximation 31 (1989) 399

Kariotis, R., see Lagally 31 (1989) 87
Köhler, U.K., see Hamers 31 (1989) 10
Krahl, D., see Lehmpfuhl 31 (1989) 161
Krishnamurthy, M., see Hembree 31 (1989) 111
Kuwano, N., see Okuyama 31 (1989) 309

Lagally, M.G., R. Kariotis, B.S. Swartzentruber and Y.-W. Mo, Ordering kinetics at surfaces 31 (1989) 87
Lanzerotti, M.Y., see Gibson 31 (1989) 29
Lawrence, M.C., M.A. Jaffer and B.T. Sewell, The application of the maximum entropy method to electron microscopic tomography 31 (1989) 285
Lehmpfuhl, G., D. Krahl and M. Swoboda, Electron microscopic channelling imaging of thick specimens with medium-energy electrons in an energy-filter microscope 31 (1989) 161
Logan, A.D., E.J. Braunschweig, A.K. Datye and D.J. Smith, The oxidation of small rhodium metal particles 31 (1989) 132
Lynch, J., see Spence 31 (1989) 233

Ma, Y. and L.D. Marks, Ballistic surface diffusion 31 (1989) 193
Ma, Y., see Marks 31 (1989) 241
Madix, R.J., Surface reactivity and surface spectroscopies 31 (1989) 58
Malis, T.F., see Chadwick 31 (1989) 205
Malm, J.-O., HREM study of surface rearrangements on AgI 31 (1989) 143
Marks, L.D., see Ma 31 (1989) 193
Marks, L.D. and Y. Ma, Self-consistent solution of the reflection diffraction problem 31 (1989) 241
Marks, L.D., see Fan 31 (1989) 357
Matsumura, S., see Okuyama 31 (1989) 309
Metcalfe, F.L., see Doust 31 (1989) 116
Métois, J.J. and J.C. Heyraud, SEM studies of equilibrium forms: roughening transition and surface melting of indium and lead crystals 31 (1989) 73
McKenzie, D.R., see Auchterlonie 31 (1989) 217

Milne, R.H., see Bleloch 31 (1989) 99
Mo, Y.-W., see Lagally 31 (1989) 87
Morante, J.R., see Romano 31 (1989) 183
Morin, R., see Stocker 31 (1989) 379
Mundschau, M., see Bauer 31 (1989) 49

Oki, K., see Okuyama 31 (1989) 309
Okuyama, T., S. Matsumura, N. Kuwano, K. Oki and Y. Tomokiyo, Dynamical diffraction effects on higher-order Laue zone lines in CBED patterns of semiconductors 31 (1989) 309
Ottensmeyer, F.P., see Farrow 31 (1989) 275
Ouyang, F. and M. Isaacson, Accurate modeling of particle–substrate coupling of surface plasmon excitation in EELS 31 (1989) 345

Petford-Long, A.K., G.R. Booker and M. Hockly, The use of high resolution electron microscopy and image simulation to determine the sharpness of InP/GaInAs interfaces in multiple quantum-well structures 31 (1989) 385
Petroff, P.M., Ultrastructures for one- or two-dimensional confinement in compound semiconductors 31 (1989) 67

Ramdas, S., see White 31 (1989) 124
Reimer, L., Calculation of the angular and energy distribution of multiple scattered electrons using Fourier transforms 31 (1989) 169
Rodenburg, J.M., see Bates 31 (1989) 303
Romano, A., J. Vanhellemont, H. Bender and J.R. Morante, A fast preparation technique for high-quality plan view and cross-section TEM specimens of semiconducting materials 31 (1989) 183

Sewell, B.T., see Lawrence 31 (1989) 285
Shao, Z. and A.V. Crewe, On the resolution of the low-energy electron reflection microscope based on wave electron optics 31 (1989) 199
Smith, A.E., RHEED calculations for non-symmetrical incidence close to a surface Bragg condition 31 (1989) 431
Smith, D.J., see Venables 31 (1989) ix
Smith, D.J., see Logan 31 (1989) 132
Spence, J.C.H., J.M. Zuo and J. Lynch, On the HOLZ contribution to STEM lattice images formed using high-angle dark-field detectors 31 (1989) 233
Steeds, J.W., see Jesson 31 (1989) 399
Stobbs, W.M., see Boothroyd 31 (1989) 259
Stocker, W., H.-W. Fink and R. Morin, Low-energy electron and ion projection microscopy 31 (1989) 379
Swartzentruber, B.S., see Lagally 31 (1989) 87
Swiech, W., see Bauer 31 (1989) 49
Swoboda, M., see Lehmpfuhl 31 (1989) 161

Takayanagi, K., see Tanishiro 31 (1989) 20
Tanishiro, Y. and K. Takayanagi, Dynamic observation of gold adsorption on Si(111)7 × 7 surface by high-resolution reflection electron microscopy 31 (1989) 20
Telieps, W., see Bauer 31 (1989) 49
Thiel, P.A., see Evans 31 (1989) 80
Tomokiyo, Y., see Okuyama 31 (1989) 309

Valdrè, U., Guest editorial 31 (1989) 159
Van Dyck, D., Three-dimensional reconstruction from two-dimensional projections with unknown orientation, position and projection axis (E) 31 (1989) 258
Vanhellemont, J., see Romano 31 (1989) 183
Venables, J.A. and D.J. Smith, Foreword to Surfaces and Surface Reactions 31 (1989) ix
Venables, J.A., see Hembree 31 (1989) 111
Venables, J.A., see Doust 31 (1989) 116

Wang, Z., see Guckenberger 31 (1989) 327
Wang, Z.L. and J.M. Cowley, Simulating high-angle annular dark-field STEM images including inelastic thermal diffuse scattering 31 (1989) 437
White, D., S. Ramdas, J.L. Hutchison and P.D. Billyard, Surface profile imaging of a bismuth uranium oxide, Bi_2UO_6 31 (1989) 124
White, D., see Cochrane 31 (1989) 138
Wiegräbe, W., see Guckenberger 31 (1989) 327
Williams, E.D. and N.C. Bartelt, Surface faceting and the equilibrium crystal shape 31 (1989) 36
Wilshaw, P.R., The experimental requirements for quantitative measurement of carrier recombination at defects in semiconductors using the EBIC technique 31 (1989) 177

Yao, N. and J.M. Cowley, The parabolas and circles in RHEED patterns 31 (1989) 149

Zeitler, E., Editorial response 31 (1989) 160
Zuo, J.M., see Spence 31 (1989) 233

Ultramicroscopy 31 (1989) 492–494
North-Holland

SUBJECT INDEX TO VOLUME 31

Analytical microscopy
The experimental requirements for quantitative measurement of carrier recombination at defects in semiconductors using the EBIC technique, *Wilshaw* 31 (1989) 177
AEM characterization of sintered silicon nitride with yttria and alumina additions, *Chadwick and Malis* 31 (1989) 205

Cross-sections
Calculation of the angular and energy distribution of multiple scattered electrons using Fourier transforms, *Reimer* 31 (1989) 169

Diffraction and optical diffraction
On the HOLZ contribution to STEM lattice images formed using high-angle dark-field detectors, *Spence, Zuo and Lynch* 31 (1989) 233
Self-consistent solution of the reflection diffraction problem, *Marks and Ma* 31 (1989) 241
Dynamical diffraction effects on higher-order Laue zone lines in CBED patterns of semiconductors, *Okuyama, Matsumura, Kuwano, Oki and Tomokiyo* 31 (1989) 309
High-energy electron diffraction from transverse stacking faults in the projection approximation, *Jesson and Steeds* 31 (1989) 399
Simulating high-angle annular dark-field STEM images including inelastic thermal diffuse scattering, *Wang and Cowley* 31 (1989) 437

Electron energy loss spectroscopy
Electron microscopic channeling imaging of thick specimens with medium-energy electrons in an energy-filter microscope, *Lehmpfuhl, Krahl and Swoboda* 31 (1989) 161
Using ELNES with parallel EELS for differentiating between a-Si:X thin films, *Auchterlonie, McKenzie and Cockayne* 31 (1989) 217
Accurate modeling of particle–substrate coupling of surface plasmon excitation in EELS, *Ouyang and Isaacson* 31 (1989) 345

High resolution
The contribution of inelastically scattered electrons to high resolution [110] images of AlAs/GaAs heterostructures, *Boothroyd and Stobbs* 31 (1989) 259
Sub-ångström transmission microscopy: a Fourier transform algorithm for microdiffraction plane intensity information, *Bates and Rodenburg* 31 (1989) 303
Phase transitions in V_2O_5 in a high resolution electron microscope, *Fan and Marks* 31 (1989) 357
The use of high resolution electron microscopy and image simulation to determine the sharpness of InP/GaInAs interfaces in multiple quantum-well structures, *Petford-Long, Booker and Hockly* 31 (1989) 385

High voltage
High-energy electron diffraction from transverse stacking faults in the projection approximation, *Jesson and Steeds* 31 (1989) 399

Image processing, 3D reconstruction
Three-dimensional reconstruction from two-dimensional projections with unknown orientation, position and projection axis (E), *Van Dyk* 31 (1989) 258
Maximum entropy methods and dark field microscopy images, *Farrow and Ottensmeyer* 31 (1989) 275
The application of the maximum entropy method to electron microscopic tomography, *Lawrence, Jaffer and Sewell* 31 (1989) 285
Automatic selection of macromolecules from electron micrographs by component labelling and symbolic processing, *Harauz and Fong-Lochovsky* 31 (1989) 333
Approximation of missing-cone data in 3D electron microscopy, *Barth, Bryan and Hegerl* 31 (1989) 365
The use of high resolution electron microscopy and image simulation to determine the sharpness of InP/GaInAs interfaces in multiple quantum-well structures, *Petford-Long, Booker and Hockly* 31 (1989) 385
Simulating high-angle annular dark-field STEM images including inelastic thermal diffuse scattering, *Wang and Cowley* 31 (1989) 437

Instrumentation
Pointed filament illumination characteristics, *Hines* 31 (1989) 319

Low energy electron microscopy, photoemission microscopy
Surface studies by low-energy electron microscopy (LEEM) and convential UV photoemission electron microscopy (PEEM), *Bauer, Mundschau, Swiech and Telieps* 31 (1989) 49

Methods and techniques
Silicon oxidation studied by in-situ TEM, *Gibson and Lanzerotti* 31 (1989) 29
Surface faceting and the equilibrium crystal shape, *Williams and Bartelt* 31 (1989) 36
Using ELNES with parallel EELS for differentiating between a-Si:X thin films, *Auchterlonie, McKenzie and Cockayne* 31 (1989) 217
Self-consistent solution of the reflection diffraction problem, *Marks and Ma* 31 (1989) 241
Pointed filament illumination characteristics, *Hines* 31 (1989) 319
Automatic selection of macromolecules from electron micrographs by component labelling and symbolic processing, *Harauz and Fong-Lochovsky* 31 (1989) 333
Evaporated carbon stabilizes thin, frozen-hydrated specimens, *Jakubowski, Baumeister and Glaeser* 31 (1989) 351
Low-energy electron and ion projection microscopy, *Stocker, Fink and Morin* 31 (1989) 379

New developments
Three-dimensional reconstruction from two-dimensional projections with unknown orientation, position and projection axis (E), *Van Dyk* 31 (1989) 258
Sub-ångström transmission microscopy: a Fourier transform algorithm for microdiffraction plane intensity information, *Bates and Rodenburg* 31 (1989) 303
Low-energy electron and ion projection microscopy, *Stocker, Fink and Morin* 31 (1989) 379

Particle optics, theory
Calculation of the angular and energy distribution of multiple scattered electrons using Fourier transforms, *Reimer* 31 (1989) 169
On the resolution of the low-energy electron reflection microscope based on wave electron optics, *Shao and Crewe* 31 (1989) 199

Reflection electron imaging and reflection high energy electron diffraction
Dynamic observation of gold adsorption on Si(111)7 × 7 surface by high-resolution reflection electron microscopy, *Tanishiro and Takayanagi* 31 (1989) 20
The parabolas and circles in RHEED patterns, *Yao and Cowley* 31 (1989) 149
On the resolution of the low-energy electron reflection microscope based on wave electron optics, *Shao and Crewe* 31 (1989) 199
RHEED calculations for non-symmetrical incidence close to a surface Bragg condition, *Smith* 31 (1989) 431

Scanning electron microscopy
High resolution secondary electron imaging and spectroscopy, *Bleloch, Howie and Milne* 31 (1989) 99
Biassed secondary electron imaging in a UHV-STEM, *Hembree, Crozier, Drucker, Krishnamurthy, Venables and Cowley* 31 (1989) 111
Biassed secondary electron imaging studies of Ag/Si(111), *Doust, Metcalfe and Venables* 31 (1989) 116

Scanning transmission electron microscopy
SEM studies of equilibrium forms: roughening transition and surface melting of indium and lead crystals, *Métois and Heyraud* 31 (1989) 73
Biassed secondary electron imaging in a UHV-STEM, *Hembree, Crozier, Drucker, Krishnamurthy, Venables and Cowley* 31 (1989) 111
On the HOLZ contribution to STEM lattice images formed using high-angle dark-field detectors, *Spence, Zuo and Lynch* 31 (1989) 233
Simulating high-angle annular dark-field STEM images including inelastic thermal diffuse scattering, *Wang and Cowley* 31 (1989) 437

Scanning tunneling microscopy
Nucleation and growth of expitaxial silicon on Si(001) and Si(111) surfaces by scanning tunneling microscopy, *Hamers, Köhler and Demuth* 31 (1989) 10
Scanning tunneling microscopy of a hydrated bacterial surface protein, *Guckenberger, Wiegräbe, Hillebrand, Hartmann, Wang and Baumeister* 31 (1989) 327

Specimen preparation
A fast preparation technique for high-quality plan view and cross-section TEM specimens of semiconducting materials, *Romano, Vanhellemont, Bender and Morante* 31 (1989) 183
Evaporated carbon stabilizes thin, frozen-hydrated specimens, *Jakubowski, Baumeister and Glaeser* 31 (1989) 351

Surfaces, clusters, interfaces and particles
Atomic structure of reconstructed group IV and III–V semiconductor surfaces, *Chadi* 31 (1989) 1
Nucleation and growth of epitaxial silicon on Si(001) and Si(111) surfaces by scanning tunneling microscopy, *Hamers, Köhler and Demuth* 31 (1989) 10
Dynamic observation of gold adsorption on Si(111)7 × 7 surface by high-resolution reflection electron microscopy, *Tanishiro and Takayanagi* 31 (1989) 20
Surface faceting and the equilibrium crystal shape, *Williams and Bartelt* 31 (1989) 36

Surface reactivity and surface spectroscopies, *Madix* 31 (1989) 58
Ultrastructures for one- or two-dimensional confinement in compound semiconductors, *Petroff* 31 (1989) 67
Influence of adsorption-site geometry and diffusion on thin-film growth: Pt/Pd(100), *Evans, Flynn and Thiel* 31 (1989) 80
Ordering kinetics at surfaces, Lagally, Kariotis, *Swartzertruber and Mo* 31 (1989) 87
Surface profile imaging of a bismuth uranium oxide, Bi_2UO_6, *White, Ramdas, Hutchison and Billyard* 31 (1989) 124
The oxidation of small rhodium metal particles, *Logan, Braunschweig, Datye and Smith* 31 (1989) 132
Surface studies of catalytic ceria using atomic-resolution TEM, *Cochrane, Hutchison and White* 31 (1989) 138
HREM study of surface rearrangements on AgI, *Malm* 31 (1989) 143
Ballistic surface diffusion, *Ma and Marks* 31 (1989) 193
Surface channelling effects in electron holograms, *Cowley* 31 (1989) 223
Accurate modeling of particle–substrate coupling of surface plasmon excitation in EELS, *Ouyang and Isaacson* 31 (1989) 345

Abstracts / Announcements / Book reviews / Comments / Editorials / Reports / Miscellaneous
Guest editorial, *Valdrè* 31 (1989) 159
New books, journals, proceedings, . . . , *Hawkes* 31 (1989) 245
Special announcement 31 (1989) 257
Abstracts of papers presented at the Annual Conference of the Netherlands Society of Electron Microscopy, Wageningen, 29–30 November 1989 31 (1989) 455